**THESIS ABSTRACT**

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Title: PROFILE OF MINERAL BONE DISEASE IN CHRONIC KIDNEY DISEASE PATIENTS – A CROSS-SECTIONAL STUDY.

Period of study: January 2016 – June 2016

Institution: Govt. Kilpauk Medical College & Hospital, Chennai.

**Background:** Mineral Bone Disease (MBD) is a broad spectrum of disorders that begins to occur very early in Chronic Kidney Disease patients. It has a clinically silent nature during the early stages. But Cardiovascular deaths occurring in CKD is due to the mineral bone disease via extra-skeletal calcification.

**Methods:** A cross-sectional study was conducted, in which 83 pre-dialytic CKD patients of stage 3-5 were analyzed for various serum biochemical parameters. They were compared with serum Bone Specific Alkaline Phosphatase (BAP), a bone turnover marker to assess their bone health.

**Results:** Vitamin D deficiency is found in 0% of stage 5 CKD. 39% of patients have high turnover bone state as evidenced by high iPTH and normal to high BAP. These are the candidates for aggressive intervention.

**Conclusion:** Prevalence of Vitamin D deficiency is changing. There is no difference in the pattern of MBD between Diabetic and Non-Diabetic CKD. Bone turnover marker assay should be included in MBD workup.

**Keywords:** Mineral Bone Disease, Bone turnover, CKD, Bone Specific Alkaline Phosphatase, Vitamin D deficiency